

Abstract:

Introduction: occlusion includes the placement method and relation of the upper-jaw teeth with the lower-jaw teeth the unusual cases of which are called malocclusion. The present study was undertaken in Ardabil considering the importance of disorders pertaining to occlusion and the scarcity of the studies in regard of these disorders.

Materials and Method: the present cross-sectional descriptive research is aimed at the investigation of the prevalence of various dental malocclusion kinds in anterior-posterior aspects in 406 students, 11 to 13 years of age, from Ardabil. The study also incorporated the investigation of the occlusal relation between the upper first molar teeth and lower first molar teeth, the occlusal relation between the upper canine teeth and lower canine teeth and the amount of anterior teeth overjet. The data that had been recorded and collected through checklist was firstly inserted in SPSS version 23. Then, frequency and the other descriptive statistics were obtained and analyzed subject to analytical statistics and statistical tests like chi-square, t-test and others to assess the variables' interrelationships.

Results: the results indicated that 361 individuals (88.9%) do not have any bad mouth habits. It was also found out that 154 individuals (37.9%) lack permanent canine teeth, 191 individuals (47.1%) have class I canine teeth, 46 individuals (11.3%) have class II canine teeth and 15 students (3.7%) have class III canine teeth. It was figured out that 10% of the students have anterior cross-bite and 90% of the students were found normal. Out of the total number of the studied students, two individuals had lost upper or lower molars of their permanent teeth on both sides. In the studied students, 313 individuals (76.6%) had class I molar relation, 39 individuals (9.6%) had class II molar relation and 54 individuals (13.3%) had class III molar relation. 309 individuals (76.1%) were found in normal range in terms of overjet and 68 individuals (16.8%) had developed overjet between 3mm to 6mm; 15 individuals (3.7%) had increased overjet with rates over 6mm and 11 individuals (2.7%) had decreased overjet and the number and frequency of the reversed overjet were 3 individuals and 0.7%, respectively. Moreover, the results indicated that 284 individuals (70%) have straight facial forms and 101 individuals (24.9%) have convex facial forms. The number and frequency of the individuals with concave facial form were 21 individuals and 5.2%.

Conclusion: in the present study, like the other similar research, the highest rates were found belonging to class I molar and canine occlusions and the highest frequency was scored for the normal overjet state. The trivial differences in the data can be pertinent to the racial differences and climatic effects and the social-economic levels of the various communities.

Keywords: malocclusion, mandibular-dental, anterior-posterior, orthodontics